

Who Should Be Screened For Tuberculosis?

Groups that are at high risk of TB infection or progression to TB disease if infected should be screened. Screening of other groups diverts resources from high-priority activities and is not endorsed or supported by the Division of TB and Newcomer Health. High risk groups include:

- Close contacts of persons with known or suspected active tuberculosis disease
- Persons infected with or at risk of being infected with HIV
- Persons who inject illicit drugs or other locally identified high-risk substance users
- Persons who have medical risk factors known to increase the risk for TB disease once infected
- Residents and employees of high-risk congregate settings (e.g. correctional institutions, nursing homes, mental institutions, other long-term residential facilities) Health care workers who serve high-risk groups
- Foreign-born persons, including children, who were born in or lived in countries more than 3 months that have a high TB incidence or prevalence
- Infants, children, and adolescents exposed to adults in high-risk categories

Persons with HIV infection

In persons with TB infection, co-infection with HIV is the most powerful risk factor for progression to active TB disease. Screening for TB infection and disease among with HIV is a high priority. This screening occurs at the initial diagnosis of HIV infection consists of a TST or IGRA test and a detailed symptom review. All individuals with positive tuberculin skin tests or blood tests with TB-like symptoms must undergo a chest radiograph and/or sputum collection to exclude active TB disease. Those with a positive TST or IGRA, but without symptoms or radiographic abnormalities should receive preventive therapy. There is no indication for preventive therapy in the absence of a positive skin test unless the individual is a close contact of a known case of TB disease.

Transient Populations (homeless persons, seasonal workers)

Screening among high-risk populations that are mobile or otherwise unlikely to complete a course of preventive therapy (homeless persons, migrant or seasonal workers) should focus on finding disease among all, infection and disease among contacts of active cases, and among the immunosuppressed. Screening for TB infection among asymptomatic, non-immunosuppressed members of these populations should be abandoned unless procedures are in place for assuring completion of therapy. If such procedures can be assured, screening for infection among young children (up to the age of 4 years) should take priority over screening in the population as a whole.

Students (preschool, daycare, primary/secondary schools, colleges and universities)

Studies have consistently shown the routine testing of all children for TB infection prior to school entry or advancement to be of low yield. This practice should be abandoned. Testing of selected groups of children may be justified if they fall into one of the risk categories outlined above. In addition, we do not advocate pre-matriculation testing of all college and university students for tuberculous infection. In this population, unless measures are in place to ensure and monitor compliance with preventive therapy, screening should focus on the identification of persons with TB disease. If screening for infection is to be done, we suggest risk assessment and symptom evaluation be done in order to identify subgroups of students in whom TST, IGRA or other evaluation is indicated.

Prenatal clinics

Pregnancy does not confer an added risk of tuberculosis infection. There is therefore no rationale for screening for TB infection in this population unless the individual belongs to one of the risk groups. Although tuberculin skin testing and IGRA blood testing are safe during pregnancy, treatment for TB infection is generally deferred until 3 months after the post-partum period. We therefore recommend that in cases where screening for infection is indicated, it be deferred until after delivery so that the interval between diagnosis of infection and initiation preventive therapy can be minimized. This practice would eliminate the need for multiple radiographic examinations. Screening for disease with a symptom assessment is appropriate and those with TB-like symptoms should undergo further evaluation, including a tuberculin skin test or IGRA blood test, chest radiograph, and sputum collection as indicated. Pregnant women with HIV infection or who are known to be close contacts of persons with TB disease should undergo TB skin testing or IGRA blood testing and, if indicated, receive preventive therapy without delay.

Occupational risk groups – health care workers, residents of congregate facilities

Patients with a history of TB infection or disease (treated and cured)

There is no indication for routine follow-up chest radiographs in asymptomatic persons with a history of tuberculous infection or a prior history of tuberculosis disease that has been treated and cured. The practice of performing annual screening chest radiographs in those with a history of disease or prior infection should be abandoned. Persons in these categories who must undergo screening for employment or school entry should undergo a symptom assessment. Those with TB-like symptoms should be evaluated further with a chest radiograph and/or sputum collection. In order to satisfy screening regulations, it is suggested that the HCW performing the symptom assessment provide the employee/employer with a statement such as:

The above named individual has a history of tuberculous infection (or tuberculous disease which has been treated and cured) and is currently free of symptoms suggestive of active tuberculosis. There is no indication for a chest x-ray at this time. This individual is believed to be free of tuberculosis in a communicable form.

Patients with a history of treated and cured MDR-TB represent important exceptions to this rule and may require a more thorough evaluation, including a chest radiograph, to document the absence of recurrence.